

Listing of Claims

This listing of claims will replace all prior versions, and listings, of claims in the application:

1-64. (Cancelled)

65. (Previously Presented) A method of applying an image to a substrate, the method comprising:

providing a first heat transfer material that comprises:

a first base layer;

a first release layer overlying the first base layer; and

a peelable transfer film on which the image is formed, wherein the peelable transfer film comprises an adhesive layer overlying the release layer and a flow-resistant layer overlying the adhesive layer, wherein the flow-resistant layer does not appreciably flow at a transfer temperature;

providing a second heat transfer material that comprises:

a second base layer;

a second release layer overlying the second base layer; and

an overlay transfer film overlying the second release layer;

positioning the peelable transfer film between the substrate and the overlay transfer film, wherein the adhesive layer is positioned between the substrate and the flow-resistant layer; and

applying heat and pressure to transfer the peelable transfer film and the overlay transfer film to the substrate such that the image is transferred to the substrate, wherein the adhesive layer and the overlay transfer film are melt-flowable at the transfer

temperature, while the flow-resistant layer is not appreciably melt-flowable at the transfer temperature.

66. (Previously Presented) The method of claim 65, wherein the first base layer, the second base layer, or both contain a cellulosic web.

67. (Previously Presented) The method of claim 66, wherein the cellulosic web is latex-impregnated.

68. (Previously Presented) The method of claim 65, wherein the first release layer, the second release layer, or both comprise a polymer having essentially no tack at a transfer temperature of about 177°C.

69. (Previously Presented) The method of claim 65, wherein the first release layer, the second release layer, or both comprise a polymer selected from the group consisting of acrylic polymers and poly(vinyl acetate).

70. (Previously Presented) The method of claim 65, wherein the second heat transfer material further comprises a conformable layer that is positioned between the second base layer and the second release layer.

71. (Previously Presented) The method of claim 65, wherein heat and pressure are applied by hand ironing.

72. (Previously Presented) The method of claim 65, wherein heat and pressure are applied using a heat press.

73. (Previously Presented) The method of claim 65, wherein the overlay transfer film is formed from a different material than the peelable film.

74. (Previously Presented) The method of claim 65, wherein the overlay transfer film comprises a polymer that melts in a range of from about 65°C to about 180°C.

75. (Previously Presented) The method of claim 65, wherein the overlay transfer film comprises a film-forming binder.

76. (Previously Presented) The method of claim 75, wherein the overlay transfer film further comprises a powdered thermoplastic polymer.

77. (Previously Presented) The method of claim 65, wherein the adhesive layer has a softening point of less than about 205°C.

78. (Previously Presented) The method of claim 65, wherein the adhesive layer has a softening point of from about 65°C to about 150°C.

79. (Previously Presented) The method of claim 65, wherein the flow-resistant layer comprises a crosslinkable polymer.

80. (Previously Presented) The method of claim 79, wherein the crosslinkable polymer is selected from the group consisting of acrylic polymers, polyurethanes, and ethylene-acrylic polymers.

81. (Previously Presented) The method of claim 65, wherein the flow-resistant layer further comprises a crosslinking agent.

82. (Previously Presented) The method of claim 81, wherein the crosslinking agent is selected from the group consisting of polyfunctional aziridines, epoxy resins, carbodiimide, and oxazoline functional polymers.

83. (Previously Presented) The method of claim 65, wherein the melt flow index of the flow-resistant layer is less than the melt flow index of the adhesive layer.

84. (Currently Amended) The method of claim [[84]] 83, wherein the melt flow index of the flow-resistant layer is less than the melt flow index of the adhesive layer by a factor of at least 10.

85. (Previously Presented) The method of claim 84, wherein the melt flow index of the flow-resistant layer is less than the melt flow index of the adhesive layer by a factor of at least 1000.

86. (Previously Presented) The method of claim 65, wherein the flow-resistant layer further comprises an opacifier.

87. (Previously Presented) The method of claim 65, wherein the peelable film further comprises an image-receptive layer that overlies the flow-resistant layer.

88. (Previously Presented) The method of claim 87, wherein the image-receptive layer comprises thermoplastic particles, a binder, and a cationic resin.

89. (Previously Presented) The method of claim 65, wherein the peelable transfer film has a thickness of from about 0.8 to about 3 mils.

90. (Previously Presented) The method of claim 65, wherein the peelable transfer film has a thickness of from about 1.2 to about 2.5 mils.

91. (Previously Presented) The method of claim 65, further comprising positioning the first heat transfer material adjacent to the second heat transfer material to form a laminate in which the peelable film is located adjacent to the overlay transfer film.

92. (Previously Presented) The method of claim 91, further comprising separating the first base layer from the first heat transfer material and thereafter positioning the laminate adjacent to the substrate.

93. (Previously Presented) The method of claim 65, further comprising separating the first base layer from the first heat transfer material, positioning the peelable film adjacent to the substrate, and thereafter positioning the second heat transfer material so that the overlay transfer film is located adjacent to the peelable film.

94. (Previously Presented) The method of claim 93, further comprising separating the second base layer from the second heat transfer material.

95. (Previously Presented) The method of claim 65, wherein the adhesive layer is uncrosslinked.

96. (Previously Presented) The method of claim 65, wherein the adhesive layer of the peelable transfer film is bonded to the substrate.

97. (Previously Presented) The method of claim 65, wherein the first heat transfer material further comprises a tie coat layer positioned between the peelable transfer film and the first base layer.

98. (Previously Presented) The method of claim 65, wherein the transfer temperature is from about 120°C to about 200°C.

99. (Previously Presented) The method of claim 65, wherein the transfer temperature is from about 150°C to about 175°C.

100. (Previously Presented) A method of applying an image to a substrate, the method comprising:

providing a first heat transfer material that comprises:

a first base layer;

a first release layer overlying the first base layer; and

a peelable transfer film on which the image is formed, wherein the
peelable transfer film comprises an adhesive layer overlying the release layer and a
flow-resistant layer overlying the adhesive layer, wherein the flow-resistant layer does
not appreciably flow at a transfer temperature;

providing a second heat transfer material that comprises:

a second base layer;

a second release layer overlying the second base layer; and

an overlay transfer film overlying the second release layer;

positioning the first heat transfer material adjacent to the second heat transfer
material to form a laminate;

separating the first base layer and the first release layer from the first heat
transfer material and thereafter positioning the laminate adjacent to the substrate,
wherein the adhesive layer is positioned between the substrate and the flow-resistant
layer; and

applying heat and pressure to transfer the peelable transfer film and the overlay
transfer film to the substrate such that the image is transferred to the substrate, wherein
the adhesive layer and the overlay transfer film are melt-flowable at a transfer
temperature, while the flow-resistant layer is not appreciably melt-flowable at the
transfer temperature.

101. (Previously Presented) The method of claim 100, wherein the overlay transfer film comprises a polymer that melts in a range of from about 65°C to about 180°C.

102. (Previously Presented) The method of claim 100, wherein the adhesive layer has a softening point of from about 65°C to about 150°C.

103. (Previously Presented) The method of claim 100, wherein the flow-resistant layer comprises a crosslinkable polymer and a crosslinking agent.

104. (Previously Presented) A method of applying an image to a substrate, the method comprising:

providing a first heat transfer material that comprises:

a first base layer;

a first release layer overlying the first base layer; and

a peelable transfer film on which the image is formed, wherein the peelable transfer film comprises an adhesive layer overlying the release layer and a flow-resistant layer overlying the adhesive layer, wherein the flow-resistant layer does not appreciably flow at a transfer temperature;

providing a second heat transfer material that comprises:

a second base layer;

a second release layer overlying the second base layer; and

an overlay transfer film overlying the second release layer;

separating the first base layer and the first release layer from the first heat transfer material and thereafter positioning the peelable film adjacent to the substrate;

positioning the second heat transfer material adjacent to the peelable film;
separating the second base layer and the second release layer from the second
heat transfer material, wherein the adhesive layer is positioned between the substrate
and the flow-resistant layer; and
applying heat and pressure to transfer the peelable transfer film and the overlay
transfer film to the substrate such that the image is transferred to the substrate, wherein
the adhesive layer and the overlay transfer film are melt-flowable at a transfer
temperature, while the flow-resistant layer is not appreciably melt-flowable at the
transfer temperature.

105. (Previously Presented) The method of claim 104, wherein the overlay
transfer film comprises a polymer that melts in a range of from about 65°C to about
180°C.

106. (Previously Presented) The method of claim 104, wherein the adhesive
layer has a softening point of from about 65°C to about 150°C.

107. (Previously Presented) The method of claim 104, wherein the flow-resistant
layer comprises a crosslinkable polymer and a crosslinking agent.